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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/706,240	11/03/2000	Ki-Hyun Joo	EXIO-004-DKA	6789

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EXAMINER
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SCHEIBEL, ROBERT C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/706,240

Applicant(s)

JOO ET AL.

Examiner

Robert C. Scheibel

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13, 15, 19, 20 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13, 15, 19, 20 and 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

- Applicant's Amendment filed 9/30/2005 is acknowledged.
- Claims 13, 15, 19, and 23-24 have been amended.
- Claim 21 has been cancelled.
- Claims 13, 15, 19, 20, and 23-26 are currently pending.

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 13, 15, 19-21, and 23-26 under 35 U.S.C. 103(a) have been considered but are moot in view of the new grounds of rejection.

### ***Drawings***

2. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2666

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims **13, 15, 19, 20, and 23-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of U.S. Patent 5,623,495 to Eng et al.

Regarding claims **13 and 15**, AAPA discloses a multi-protocol packet-based base station in element 210 of figure 2. Applicant's admitted prior art discloses the limitation of the wireless signaling logic and the media gateway control protocol logic in lines 11-13 of page 4 (line numbers maintained from first office action and thus refer to the original specification). The protocol units for handling wireless signaling and multi-media transactions clearly disclose the signaling and media control logic. Further, regarding claim 15, AAPA discloses the limitation of a call agent in element 220 of Figure 2 and the limitation of the mobile terminals adapted to communicate via multiple protocols in the mobile terminals of Figure 2.

Regarding claims **23 and 24**, AAPA discloses steps of receiving a call message and processing the call message in the protocol unit to handle wireless signaling described on line 12

Art Unit: 2666

of page 4 (line numbers maintained from first office action and thus refer to the original specification). It is inherent that the base station must receive call messages if the protocol unit is going to actually handle wireless signaling. Further, it is also inherent that the protocol unit for handling wireless signaling will process the call messages. AAPA further discloses transmitting messages to a destination using RTP/MGCP in lines 19-21 of page 4 of the updated specification and in Figure 2.

AAPA does not disclose expressly the limitation of the address generation logic for generating a virtual circuit identity code (claims 13 and 15). AAPA also does not disclose expressly the limitations of providing a virtual circuit identity code (claim 23) or providing a unique communication identifier (claim 24).

Eng discloses a wireless base station in the portable base station (PBS) of figure 4 discussed throughout. The virtual circuit identity code is the virtual path identifier (VPI) discussed throughout. The VCIC (VPI) is associated with the mobile wireless device in that each mobile is assigned a VPI to use when transmitting data. This is clear in lines 33-35 of column 7 which describe how a new VPI is sent to the mobile when it roams to a new PBS. In the combination of the AAPA and Eng, the VPI is used in linking communication signals between the wireless signaling logic unit and the media gateway logic unit because it is the VPI that is used to route the wireless cell on the infrastructure side (see passage from 67 of column 4 through line 2 of column 5, for example). Furthermore, the VCIC (VPI) enables signaling with the mobile device using a first protocol (wireless ATM or WATM) and as described above, this VPI is used to route traffic on the wired portion of the network, thus enabling the establishment of a media communication session between the mobile wireless device and the remote endpoint.

Art Unit: 2666

AAPA and Eng are analogous art because they are from the same field of endeavor of wireless communication systems. At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify AAPA to use a wireless ATM protocol on layer 2 and then use ATM as the layer 2 on the network side as described in Eng. The motivation for doing so would have even to enable the network to be more efficient by using less protocol conversion and thus not require VPI translation as suggested by Eng in the abstract and in lines 65-67 of column 1 and lines 25-29 of column 2. Therefore, it would have been obvious to combine Eng with AAPA for the benefit of less protocol conversion to obtain the invention as specified in claims 13, 15, 23, and 24.

Regarding claims **19**, the combination of AAPA and Eng discloses the limitations as follows: Eng discloses the limitation that the VCIC creates a virtual traffic communication path (the virtual path) to enable the base station to convert mobile signals between the first protocol and the MGCP (WATM to ATM conversion is described in the passage from line 67 of column 1 through line 3 of column 2).

Regarding claim **20**, AAPA discloses the limitations of these claims in Figure 2 and lines 19-21 of the updated specification. (The first protocol is TIA/EIA-634 and the second protocol is MGCP). Similarly, figure 2 and lines 19-21 of AAPA disclose the limitations of claims **25** and **26**.

### ***Conclusion***

Art Unit: 2666

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert C. Scheibel whose telephone number is 571-272-3169. The examiner can normally be reached on Monday and Thursday from 6:30-5:00 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert C. Scheibel  
Examiner  
Art Unit 2666



DANG TON  
PRIMARY EXAMINER